SEQUENCE LISTING

```
<110> Greenspan, Ralph J. Edelman, Gerald M.
```

)

<120> Method For Functional Mapping of An Alzheimer's Disease Gene Network and For Identifying Therapeutic Agents for the Treatment of Alzheimer's Disease

```
<130> P-NI 4577

<150> US 09/490,243

<151> 2000-01-24

<160> 80

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 509

<212> DNA

<213> Drosophila melanogaster
```

<400> 1
gatagattcg tggccatctg taacccattg ttatactcag ttgctatgtc ccagaggctc 60
tgcatccagc tagtggtggg tccctatgtc attggactca tgaataccat gactcacaca 120
acaaatgcat tttgtctccc tttttgtggc cctaatgtca tcaatccttt cttctgtgat 180
atgtccccct tcctttccct tgtatgtgct gataccaggc tcaataagtt ggcagttttc 240
atcgtggctg gagctgtggg agtcttcagt ggcccgacta tcctgatttc ctacatttac 300
atcctcatgg ccatcctgag gatgtccgct gatgggaggt gcagaacctt ttctacttgc 360
tcttctcacc cgacagctgc tttcatctcg tatggtaccc tcttctttat ttatgtacat 420
cccagtgcaa ccttctccct ggatctcaat aaagtagtgt ctgtgttta cacagcagtg 480
attcccatgc tcaacccctt catctgcag

```
<210> 2
<211> 264
<212> DNA
<213> Drosophila melanogaster
```

<400> 2
gcaataaata cagacaatta tatatattt tctataattt gtttcatttt atcattttat 60
tgattgtgaa cgaaaaagga aaaaaataaa cttagaaaaa gataacaaat aaattgctaa 120
atttaagcgc aaaagttcaa ttaataaaaa ttagaatttt aatactaaca taatttggac 180
tatttatata tacatacgca tatatataca actctatata tgaataatta gtaacaaatc 240
aaatcaattt ccataacaac cgct
264

```
<210> 3
<211> 367
<212> DNA
<213> Drosophila melanogaster
```

```
<400> 3
tcttttttga attttattca attttaaagt acaattgcac gagtgatttt tgttgcactc 60
gtcactaaga atatatata attttttgt ttttttttt ggcggttgtt atggaaattg 120
atttgatttg ttactaatta ttcatatata gagttgtata tatatgcgta tgtatatata 180
aataqtccaa attatqttaa tattaaaatt ctaatttta ttaattgaac ttttgcgctt 240
aaatttagca atttatttgt tatctttttc taagtttatt tttttccttt ttcgttcaca 300
atcaataaaa tgataaaatg aaacaaatta tagaaaaata tatataattg tctgtattta 360
ttgcgga
<210> 4
<211> 483
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(483)
<223> n = A, T, C or G
<400> 4
ttgqtttgat aatgntcnta ctccaaaaac aaaacaataa tttatactgg tcntgnttgn 60
ttqtcataac ntcacaqtaq tatactcgnt cnttttggta ataatcccga aaaaactgna 120
ccgaatccag naanatatcc ccgtcaanaa aaaaaacata taaaatatga aatggtacat 180
aanaaatatq tccantccaa ccaaccaacc aaacaaccaa ccaacaaaca acaannacca 240
accaaccaa aatccaaat aaccgccaac aatccaaaat ggtaactaaa accattggtg 300
aaaacaggat acaagccact tatcctaaca aacgccaggc tacactgaga aaataagcat 360
cqnqaqttqq tatqqatagc agaaattacc catattcgtg gactaaaggt ggtgtactga 420
ttgactgatt gattgacgtg ttgggtggtg aatacatata tttcgactgc atgccaagga 480
ata
<210> 5
<211> 395
<212> DNA
<213> Drosophila melanogaster
<400> 5
tgtttgtatg tctactccaa aaacaaaaca ataatttata ctgtctgttg ttgtcataac 60
tcacatatat actegtettt tgtatateeg aaaaactgae egateeaaaa atateeeege 120
aaaaaaaaac atataaaata tgaatgtaca taaaaatatg tccatccaac caaccaacca 180
aacaaccaac caacaaacaa caaaaccaac caacccaaaa tcccaaaaac cgccaacaat 240
ccaaaatgta actaaaacca ttgtgaaaac agatacaagc cacttatcct aacaaacgcc 300
aggetacact gagaaaataa geateggagt tggtatggat ageagaaatt acceatatte 360
gtggactaaa ggtggtgtac tgattgactg attga
<210> 6
<211> 188
<212> DNA
<213> Drosophila melanogaster
<400> 6
agtattttct ttagtttctt tgaggtgtgt tagcacactc attgttgctt tagcctagcg 60
ctgqtttatt aaatgttagc taagtttaaa ttatgtattt acagatgctg tgtgctagct 120
cgaaagtgat aatttsgtgt tattttttgt gtatgggatt ttgataaatg ccttatgagt 180
```

```
188
ttagaacg
<210> 7
<211> 186
<212> DNA
<213> Drosophila melanogaster
<400> 7
agtattttct ttagtttctt tgaggtgtgt tagcacactc attgttgctt tagcctagcg 60
ctggtttatt aaatgttagc taagtttaaa ttatgtattt acagatgctg tgtgctagct 120
cqaaaqtqat aatttqtqtt attttttqtg tatgggattt tgataaatgc cttatgagtt 180
tagaac
<210> 8
<211> 297
<212> DNA
<213> Drosophila melanogaster
<400> 8
acatttccat ggtttatttt aatgtgaagt taaactgcaa atttctagtc taagcgtagt 60
agttaagatt agcettette ttegeetgea etteeatgat ggegteeatg aagtettegt 120
gtgtaaccga gttggcggag cgacgcagtg cgatcatacc agcttccaca cagacggctt 180
tgcactgggc gccgttgaag tcatccgtgg atcgggacaa ttcctcgaaa ttcacatcat 240
tqctaacqtt cattttacqc gagtgaatct gcataatacg ggcacgggct tcctcgt
<210> 9
<211> 710
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (710)
\langle 223 \rangle n = A,T,C or G
<400> 9
gatatatatt tttgtttatt ttaaaaaggt tgggtattga tttcagtacg tctcccattc 60
tagtaaatgg ttacttttaa nagccgttcc gatgttattt tataggcgat cttcnttgtg 120
caactcaqat cqaaactqaa aaattttaca tttccatggt ttattttaat gtgaagttaa 180
actgcaaatt Ectagtctaa gcgtagtagt taagattagc cttcttcttc gcctgcactt 240
ccatgatggc gtccatgaat ctcgtgcgta accgaattgg cggancgacg cagtgcgatc 300
ataccacttc cacacaaacg gtttgcactg ggcgccgttg aatcatccgt ggatcgggac 360
atcctcgaaa tcacatcatg ctaactttca tttacgcaat gaattgcata atacggccgg 420
cttccccttg ggatttgaaa ncatctacat ccnangacca accccccaac cgatccaaan 480
tccccaatgg tcccaatcca aggnaattcn aattcccnct gnggcccact gcntaaggcc 540
atccccattn atcttaatcc ggcgcnttnn ctctnaggaa ccgnttccat atcctgncnn 600
cctccntggt tacaaagccc antccccatn ccnaaggaat gaccttcgct accgggtggt 660
centactnte necacentte ttetetnett egtecacang getnggeatg
<210> 10
<211> 479
<212> DNA
<213> Drosophila melanogaster
```

```
<400> 10
gatatatatt tttgtttatt ttaaaaaggt tgggtattga tttcagtacg tctcccattc 60
agtaaatggt tacttttaag agccgttccg atgttatttt aaaggcgatc ttcaaggtcg 120
aactcagatc gaaactgaaa aattttacat ttccatggtt tattttaatg tgaagttaaa 180
ctgcaaattt ctagtctaag cgtagtagtt aagattagcc ttettetteg cetgcaette 240
catgatggcg tccatgaagt cttcgtgcgt aaccgaattg gcggagcgac gcagtgcgat 300
cataccaget tecacacaga eggetttgea etgggegeeg ttgaagteat eegtggateg 360
ggacaattcc tcgaaattca catcattgct aacgttcatt ttacgcgagt gaatctgcat 420
aatacgggca cgggcttcct cgttgggatg tgggaactcg atcttacgat ccagacgac 479
<210> 11
<211> 355
<212> DNA
<213> Drosophila melanogaster
<400> 11
tggccccagg acgagcgttg cctcgcccga ggacgatata ccctgcccca taataatcct 60
aaacccatac cgaccggcag gtggtcttcc agaggagacg ataacgacgt agcgtgttcg 120
aaagggacag tggagtcagt ggtcggcaaa ggtggtccca ggacgagcgt ttgcctcgcc 180
cgaggacgat acaccctaac ccataacatc ataatcccag ccgggccgac tcgtcgtccg 240
tgtcaaggag caagcaggac cacggaggca aggcgttgca ggagaaatgc cgcaggagca 300
ccgagattgc cgaagaagtt atccataagg ctgtagaata aaatactata ataag
<210> 12
<211> 171
<212> DNA
<213> Drosophila melanogaster
<400> 12
gtatgttaac aaaaattact aaccctataa acattaacgt ccatcgggac taaataaagc 60
aaatgtaaca cgtctagaca ttgacataat ccctgttcaa tatcacgcaa ttttaaacca 120
tccaacggca gcataaattt cttctccttc tcatcctcgt ccttacacac a
<210> 13
<211> 170
<212> DNA
<213> Drosophila melanogaster
<400> 13
tatgttaaca aaaattacta accctataaa cattaacgtc catcgggact aaataaagca 60
aatgtaacac gtctagacat tgacataatc cctgttcaat atcacgcaat tttaaaccat 120
ccaacggcag cataaatttc ttctccttct catcctcgtc cttacacaca
<210> 14
<211> 162
<212> DNA
<213> Drosophila melanogaster
<400> 14
gtatgttaac aaaaattact aaccctataa acattacgtc catcgggact aaataaagca 60
aatgtaacac gtctagacat tgacataaat ccctgttcaa tatcacgcaa ttttaaacca 120
tccaacggca gcataaattt cttctccttc tcatcctcgt cc
                                                                   162
```

```
<210> 15
<211> 249
<212> DNA
<213> Drosophila melanogaster
<400> 15
ddtcaatagg wraaaatata gaataataaa gatatgaaty aaagattggg taaagagata 60
ggataaamat agtaaaggaa gaaagtgtgc atggaattag aaattaggaa ttaggttttt 120
ttdtttttca gataaaagga maaagaagga aaaatttaaa gaaaggatat ggaaaaatga 180
gagaagaaat tatagagaaa ataatgcatg attgagaatg aagtaagaat tgagaggaat 240
waaattaag
<210> 16
<211> 709
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (709)
<223> n = A, T, C \text{ or } G
<400> 16
canataatgt ctctatcgct gtaataattc cancgtaaca cqaagqcaat qtqatcaqta 60
natgagaaat tttatccatc tcttctattt ttgcaccagc tgccaacaat tcntttttt 120
tttcgtctaa aatangaaaa tggcttaata gtgacatctc acttgatagc ttcaqaqaaa 180
gcaaacgttt tcgcagcgcc agttgcgacg ccaaactttt tcgttcataa acggcgtcca 240
aatteteaag aactgaegeg eegtaatgte ettgttgega aattaaaaae aateettagg 300
tacaantene gaagggeaat tetgeanata teeateacae tggeggeget egaacatgea 360
ctananggcc aattccccta tagtgatcta ttacaatcct ggcgtcttta cactctgann 420
ggaaaccggc ntaccaatta tenetgaeca teeettenea engnttnaac aaageeenga 480
ccccanttg ccccgaagga aggaccetgt acgcentace gnggtgngtn cccntactac 540
tencenanen tetttettin eintteeete eggieegiaa eeaigggeet igieatatet 600
engecanena ntatnggage ettggeecca aagnteecaa tgatetenaa ngaetenega 660
nccccccgcc ntaataggat cangctgnna nacataatcn catcacngg
<210> 17
<211> 468
<212> DNA
<213> Drosophila melanogaster
<400> 17
cagataatgt ctctatcgct gtaataattc catcgtaaca cgaaggcaat gtgatcaqta 60
gatgagaaat tttatccatc tcttctattt ttgcaccagc tgccaacaat tcacttagta 120
agttegteaa aaatatgaaa atggettaat agtgacatet eactegatag etteaqagaa 180
agcaaacgtt ttcgcagcgc cagttgcgac gccaaacttt ttcgttcata aacggcgtcc 240
aaattctcaa gaatctgacg cgccgtaatg tcgcttgttg cgaaatttaa aaacgagtcg 300
cttaggtacg aattcacgaa gggcgaattc tgcagatatc catcacactg gcggccqctc 360
gagcatgcat ctagagggcc caattcgccc tatagtgagt cgtattacaa ttcactqqcc 420
gtcgttttac aacgtcgtga ctgggaaaac cctggcgtta cccaactt
                                                                   468
```

```
<211> 416
<212> DNA
<213> Drosophila melanogaster
<400> 18
cattgacttg gcaaaatgaa acaaaacaaa ttgaaatcta tttgtaattt acatttaagc 60
ctaaaaacat atgattatat caaacactta gttttagtcg ataattgttt ataatttttc 120
agacacacac acgcaacaca cacagacaca ttcaacttaa agtgcgtaac ataaagtaaa 180
ataaataaat gaaaacacat taacacgaac aaaacaataa tcaagaactg gagcggattg 240
ggtttcgttt tccagcgatt acctggagat caccatggca accagtcaca ctcatttaca 300
cttggaatgc atgggagttc ttctatcaac taacaaatcc tatttcatat acaacacgtt 360
aactatqttt qcttqqttag ttcgctttcc tgtcgcttgt tataagtaca caatat
<210> 19
<211> 286
<212> DNA
<213> Drosophila melanogaster
<400> 19
tcaaagcagg tgcaacgttg tacatacata tatagaaaga acaaaatgag agagatcaat 60
ctgtaacttg aatgtggtta agtaaagagg tgcatatata tttttttaca cgcgtatata 120
qtttqcqttt ttcgctttcc acacaagata cgtacttcgt agcccccctt cccctttcca 180
aatactgtat cacaaagatc ataactcaaa atgctattgc tttgacttac atcttatttc 240
ggtggtgtca actgcgccac catacgaaaa tacataaatt atagcg
<210> 20
<211> 706
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(706)
<223> n = A, T, C or G
<400> 20
atacatactt ttctgcttat tggaatagtc tacacacttt tgctacatag gtacaattaa 120
gtttgtggct tgccctttgc gaattacaat atggaaacgg atacagaaca gaaaatagtt 180
taacaataat attgctggaa taaacacatc caaggtaata ctcagacagc actcgtcatc 240
geocteatee angatattgg cetgetggeg cacategatg ceetgetgea caacteegee 300
ttcttggctt cggcttgaag ncttnccccc ctcctgttcn ggatctcctc antccgtaaa 360
acceteccen caacteteca etecaaatga tttnggeaat tenateaate eggganaate 420
catgcccatg gettingtat teceeteet tggcaetnen aaceeeggn taaacgcatt 480
cctgtgttca ttcaatccaa ggnaatccgc attctcnctg nggcctcact ctctaaggcc 540
atcccnaata tctntaatcc ggcgctttaa nctatggaac ngntacatac ctgacatcct 600
tccatggtaa caaagcccat ccccaatncc cangangacc ctcgctaccg ggttggtcct 660
actatnneae ecetnttete ttettegtee anatggeing tettit
                                                                706
<210> 21
<211> 459
<212> DNA
<213> Drosophila melanogaster
```

```
<220>
<221> misc feature
<222> (1)...(459)
\langle 223 \rangle n = A,T,C or G
<400> 21
atacatactt ttctgcttat tggaatagtc tacacacttt tgctacatag gtacaattaa 120
gtttgtggct tgccctttgc gaattacaat atggaaacga tacagaacag aaaatagttt 180
aacaataata ttgctggaat aaacacatcc aaggtaatac tcagacanca cgtcgtcatc 240
gccctcatcc aggatattgg cctgctggcg cacatcgatg ccctgctgca gcaactccgc 300
cttcttggcg tcggccttga tgcgtgcctc gcgcttcttg tcctggatct tcttcagtcg 360
gtagaactcc tcacgctcga gctcgtccag ctccganatg atgtaggcca aagtcctatc 420
gattcggggg atgatcacat gctcaatggc gttttggta
<210> 22
<211> 483
<212> DNA
<213> Drosophila melanogaster
<400> 22
cgggcataaa gtaggtggga aggtaaggaa ggtactaagc gcactccaaa tctgtttggt 60
aaacattgta gacgaagcat gtggaattaa agccaaacac gataattgtg ccgagactct 120
tggccagaga ttgtcaaggt cgtgcatett acgcgagtaa atcaaggaaa atgtgagcag 180
gttaaagaaa atttctacct actaaaaaca atattaatgc atctccaaat attagtttct 240
tcctacagga tggtagatgg ttttggaaat gtatcttttt atgtaacctg ctctttggtg 300
tcagatccga attcacgaag ggcgaattct gcagatatcc atcacactgg cggccgctcg 360
aqcatqcatc taqaqqqccc aattcgccct atagtgagtc gtattacaat tcactggccg 420
tegttttaca aegtegtgae tgggaaaaee etggegttae ecaaettaat egeettgeag 480
caa
<210> 23
<211> 514
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (514)
\langle 223 \rangle n = A,T,C or G
<400> 23
cggctctaat ttcattttgt gcatattttg gtcctggttc tggtgcctat ccctcctttt 60
tggntcggcc cgtgcaggag cttaattaat tcccccaaaa atatttataa ctttgggscc 120
aatacggctg ctgttgctgc tgctgactac tgaracatat ttaatttata tttcttggag 180
tgtgtgcggc ttgtcaatgg ctgggaatct aagaaattta tgcatgactg caacagggtc 240
aagttgcaaa gcccttagcc tttaatgcca tccagctgcc gggaaagccg ggaaagctga 300
naaaacaaaa ctgactcctt actgaagctg aaactgaaag aacttttagt cctatccagg 360
gttgcqqatq qatccaactc cccagataag cagatttatg acctaaacac cgaaactcca 420
atactggaaa nacaatcngt tttcngtttc gtactggatc cgaatcncaa aggcaaatct 480
genattecte accgeggeg cycaacatet etaa
                                                                 514
```

```
<210> 24
<211> 430
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(430)
<223> n = A, T, C \text{ or } G
<400> 24
cggctctaat ttcattttgt gcatattttg gtcctggttc tggtgcctat ccctcctttt 60
tggctcggcc cgtgcaggag cttaattaat tcccccaaaa atatttataa ctttgggccc 120
aatacggctg ctgttgctgc tgctgactac tgaaacatat tttaatttat atttcttgga 180
gtgtgtgcgg cttgtcaatg gctgggaatc taagaaattt atgcatgact gcaacagggt 240
caagttgcaa agcccttagc ctttaatgcc atccagctgc cgggaaagcc gggaaagctg 300
agaaaacaaa actgactcgt actgaagctg aaactgaaag aacttttagt cctattccrg 360
gggttncgga tggatccaac yccccagata agcagattta tgacctaaac accgaaactc 420
aaataactgg
<210> 25
<211> 213
<212> DNA
<213> Drosophila melanogaster
<400> 25
aacattttag attgaaacac attccaaaag tctaagactc tagcttcaca acggtcgtct 60
teteggacae gtacagbbeg teaaggaact tacggatate ettgttettg acgstegtgg 120
actgctggat gagggcggca gatccggaga cagactcaat atcgttccgt amscgtaagg 180
tyggccctct ggavagtgag gtcacccacc gcg
<210> 26
<211> 365
<212> DNA
<213> Drosophila melanogaster
<400> 26
aacattttag attgaaacac attccaaaag tctaagactc tagcttcaca acggtcgtct 60
tctcggacac gtacagaccg tcaaggaact tacggatatc cttgttcttg acggtcgtgg 120
actgctggat gagggcggca gatccggaga cagactcaat atcgtttccc tccacgataa 180
qttcqtcctt ctgggcagtg gagttgacca cggtgacgcc aggagccatc tccacacgac 240
ggatgtactt ctcacccaag aagttacgga tctcaatgac cgtgttgttc tcggaggtga 300
cacagttgat ggggaaatgg gcgtacacag cacgcatctt gtactggatc cgaattcaca 360
                                                                    365
aaggg
<210> 27
<211> 212
<212> DNA
<213> Drosophila melanogaster
<400> 27
acattttaga ttgaaacaca ttccaaaagt ctaagactct agcttcacaa cggtcgtctt 60
ctcggacacg tacagbbcgt caaggaactt acggatatcc ttgttcttga cgstcgtgga 120
```

ctgctggatg agggcggcag atccggagac agactcaata tcgttccgta mscgtaaggt 180 212 yggccctctg gavagtgagg tcacccaccg cg <210> 28 <211> 691 <212> DNA <213> Drosophila melanogaster <220> <221> misc feature <222> (1) . . . (691) $\langle 223 \rangle$ n = A, T, C or G <400> 28 atacatactt ttctqcttat tqqaataqtc tacacacttt tqctacataq qtacaattaa 120 gtttgtggct tgccctttgc gaattacaat atggaaacgg atacagaaca gaaaatagtt 180 taacaataat attqctggaa taaacacatc caaggtaata ctcagacagc actcgtcatc 240 geocteatee angatattgg cetgetggeg cacategatg ceetgetgea caacteegee 300 ttettggett eggettgaag nettneecee eteetgtten ggateteete anteegtaaa 360 acceteccen caacteteca etecaaatga tttnggcaat tenateaate eggganaate 420 catqcccatq gctttngtat tcccctcct tggcactncn aacccccggn taaacgcatt 480 cctqtqttca ttcaatccaa ggnaatccgc attctcnctg nggcctcact ctctaaggcc 540 atcccnaata tctntaatcc ggcgctttaa nctatggaac ngntacatac ctgacatcct 600 tccatggtaa caaagcccat ccccaatncc cangangacc ctcgctaccg ggttggtcct 660 actatnneac ccctnttctc ttcttcgtcc a 691 <210> 29 <211> 677 <212> DNA <213> Drosophila melanogaster <220> <221> misc feature <222> (1)...(677) $\langle 223 \rangle$ n = A, T, C or G <400> 29 cgggcataaa gtaggtggga aggtaaggaa ggtactaagc gcactccaaa tctgtttggt 60 aaacattgta ñacnaagcat gtggaattaa agccaaacac natttttntg ccnatactct 120 tqqccaqaqa ttqtcaaqqt cqtqcatctt acqcqaqtaa atcaaqqaaa atqtqaqcan 180 gttaaagaaa atttctacct actaaaaaca atattaatgc atctccaaat attagtttct 240 tcctacagga tggtagatgg ttttggaaat gtatcttttt atgtacctgc tctttggtgt 300 canateenaa teneqaaqqq caattetgea aatateeaca eetggeggge egetegaaca 360 tentetaaan ggecaateen eenattatga ateetatana atenetggee gtettttaca 420 ctctganggg aaaccnggcn ttnccactaa ccctgcacct cccttccnct gnttatacaa 480 aagconcatc cotocacatt goodctaagn atgaccoott cgcctanccg gggtntgttc 540 entactette nnetaceece tetteetett centteggte enactaaggg eetggeattt 600 tgcccccaat aaggngnett gcccnaagte ccaatgtete nangacteeg aacccenece 660 677 ctaaaggacn cctgaaa

<210> 30 <211> 141

```
<212> DNA
<213> Drosophila melanogaster
<400> 30
atgatataat ggattggtaa tcaattggca tcgaaattaa tttacgatat aaacaccact 60
taacgccgcc tcaacctaat tactgtctgc atatgcaata gaaaacgtat ataaattaat 120
taaataaaaa aaaaggaaag t
<210> 31
<211> 322
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(322)
<223> n = A,T,C or G
<400> 31
atttcgcgac aggcttcggc acgccagtat ataacccaaa acacacnaac ntcaggggct 60
ggancgcgtc actgccgtgc tcctccagcc ggcacagtca ttccccgccc ccacaccaan 120
caaaaccggc cgcttgtgca natgacatag gcgcgaccan ccaactgacc cggctgacca 180
gacttgcacc gtgcgccatc aactggaatc ttggccacaa gcacagcttt agtttggccc 240
gctatcccnc acacaaaccc agantggggg tctatggaag accacaagtn gttgcgttgg 300
aactgctaaa natttnnact gt
                                                                    322
·<210> 32
<211> 308
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(308)
\langle 223 \rangle n = A,T,C or G
<400> 32
acqcatacaa tatatgatta tacatacata tatatattta caatgataaa gaatgtaagg 60
cccaagccaa gcaaacacat atgtaacgtg tatttgaacc acgtacttat tatttacatg 120
tttacatata cgaacatcca aagcaaaggt atatacacgt ataggactca acatttacaa 180
attcaatatt cttatatgtg gaaagcanag cgttacgatt atctcccanc taactggaag 240
cgattgaatg tctatacatn atttgtaatg ccaaataaaa taaaatatat cacgttatat 300
taaacagt
<210> 33
<211> 201
<212> DNA
<213> Drosophila melanogaster
<400> 33
acgcatacaa tatatgatta tacatacata tatatattta caatgataaa gaatgtaagg 60
cccaagccaa gcaaacacat atgtaacgtg tatttgaacc acgtacttat atatttacat 120
gtttacatat acgaacatcc aaagcaaagg tatatacacg tataggactc aacatttaca 180
```



```
201
aattcaatat tcttatatgt g
<210> 34
<211> 187
<212> DNA
<213> Drosophila melanogaster
<400> 34
acgcatacaa tatatgatta tacatacata tatatattta caatgataaa gaatgtaagg 60
cccaagccaa gcaaacacat atgtaacgcg tatttgaacc acgtacttat atatttacat 120
gtttacatat acgaacatcc aaagcaaagg tatatacacg tataggactc aacatttaca 180
aattcat
                                                                    187
<210> 35
<211> 687
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(687)
<223> n = A, T, C \text{ or } G
<400> 35
agaattacca cgcgaacaca attctgtttt attgttttta atacatattt aatctttgcg 60
anaagagcta gtgtaggtag tctggaattt ttcatatatt taacgatatc cattggtaat 120
gattacatag ttggattaga actaatactt gtagcagtta atggaatgtt caccaccgct 180
ctggatcatc gttgctggtc agctggcaag gcatcatcac gcacttttcc atgcggacgc 240
natcettqca cttqtqqctc aatcqqtqtt cattaaggtt cgqqttcqtt ggcqaacqqc 300
attategeca caegttgegg tgeatggtgt ceaageggaa caeteceaat tanenacaet 360
eqtectgegg teeggttgen gaetettace acatecttee tetecaatee eegteeetga 420-
ttgattacnn tcatccaccc ctggtaacac nattccaact tccagttgct tggaaatgct 480
geneectact ecquatacqu enetecette ecatguacen ecceagaget tgeacgtgga 540
contrateat ccaagnaate tgcattetee egeggeneae tettaageea teeceaatat 600
cttaatccgc ccttaatcta tgaaacgntt ccatacctgn cancetecet ggtaaaaanc 660
ccatctccct tnccnangan gaccctc
<210> 36
<211> 311
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (311)
<223> n = A, T, C \text{ or } G
<400> 36
teccateaat tegttaetea teaattgaaa ttteagattt ggtaatgeta aagggetate 60
atgattgcag ttctatgaag tggatcaaag cgatttcggg tcaaagattg cgggtcgctg 120
ctaqaaaqat tqatctctaq tqcttctcca qtqcttqctt aqttcqqcqa qqqcataacc 180
ttgatgeget ceaaggettg ttteteeang gtetegeggt gettgggate ggegatetgg 240
ataagttegt acateetetg gegeacatte ttgeegaaca gegaagegat tecatgetee 300
```

```
311
gtgacgactt a
<210> 37
<211> 670
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(670)
\langle 223 \rangle n = A,T,C or G
<400> 37
cccatcaatt cgttactcat caattgaaat ttcagatttg gtaatgctaa agggctatca 60
tgattgcagt tctatgaagt ggatcaaagc gatttcgggt caaanattgc gggtcgctgc 120
tagtaaaata gtgatctcta gtgcttcttc agtgcttgct tagttcggcg agggcataac 180
cttgatgcgc tcgaagcttg tttctccagg gtctcgcggt gcttgggatc ggcgatctgg 240
ataagttcgt acatcctctg gngcacattc ttgccgaaca cgaagcgatt ccntgctccg 300
tgacnactta ntggacttng gcacgcgaan ttgacaaccc agcgcctgcc ttcacgttng 360
gaacaatett geteteeet tgttggtggt caatgeatgg enataattge acacecatee 420
atcnaaacct concgtcccc naatnaattc acctntcccc naaccgggat taaanccgga 480
acatcatcta cncctgtcnt ccattccaat ccaagggaat ctnnattcac cngcgggcnc 540
caacatcten aaggecatee caatatnttt anateegget ettaaeteta tggaaennet 600
tncataacct ganteettee etgttteaag cencateece netteecaag ataceetege 660
                                                                    670
<210> 38
<211> 192
<212> DNA
<213> Drosophila melanogaster
<400> 38
accatttaat tattaaatat gatttattta tattaatatg tagtcaaaaa ctccgtgtta 60
gctttaattt acctacccca ctttggatct aaataaatat gttaaatgtt gattcaagcg 120
tgataattta tttggaacag cattgcgaaa attgrgtagt ycataatgtt ttttcttcct 180
ggkcactgag ca
<210> 39
<211> 362
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (362)
<223> n = A, T, C \text{ or } G
<400> 39
gctgaactgg acctgaatat aaacntatac acatctattg caacaangat acacccttg 60
ctgttaacca cctgcaacat ccaancttct tacatccctg gtgttagttc gacanactct 120
acatttcccc acctctgccg antgctgana gttaantcat gggaacagga natnccnctt 180
ccccaaaggg aatatttnt gttnaaataa atactgcctc ttgcngttca acgtananan 240
anaaataccn aatteegaaa ggggeenaan ttneegggen canannggee tgeetentag 300
```

7

ggaateneca neceettntt atangeeete tteegeetat aaaettgtge engaaneeee 360 362 <210> 40 <211> 322 <212> DNA <213> Drosophila melanogaster <220> <221> misc feature <222> (1) . . . (322) <223> n = A, T, C or G<400> 40 atttcncgac aggcttcggc acgccagtat ataacccaaa acacacaaac gtcaggggct 60 ggaacgegte actgeegtge teeteeagee ggeacagtea tteeeegeee ceacaceaag 120 caaaaccggc cgcttgtgca gatgacatag gcgcgaccag ccaactgacc cggctgacca 180 nacttgcacc gtgcgccatc aactggaatc ttggccacaa gcacagcaat agtttggccc 240 gctatcccca cacanaaacc cacantgggg gtcnatggaa gaacacaagt ggttgcgtgg 300 aactgctaaa aatataaaac tg <210> 41 <211> 323 <212> DNA <213> Drosophila melanogaster <220> <221> misc feature <222> (1)...(323) <223> n = A, T, C or G<400> 41 atttcgcgac aggcttcggc acgccagtat ataacccana acacacaaac ntcaggggct 60 qqaacqcqtc actqccqtgc tcctccagcc ggcacagtca ttccccgccc ccacaccaag 120 caaaaccggc cgcttgtgca gatgacatag gcgcgaccag ccaactgacc cggctgacca 180 gacttgcacc gtgcgccatc aactggaatc ttggccacaa gcacagcaat agtttggccc 240 gctatcccca cacagaaacc cagantgggg gtctatggaa gacnacaagt ggttgcgtgg 300 323 aactgctaaa aatataaaac tgt <210> 42 <211> 176 <212> DNA <213> Drosophila melanogaster <400> 42 caagtgegge ggegacaaga aateegeetg eggetgetee aagtgagett teeeceaaaa 60 aagatetgga gtagaggege tgeatettgt eteegaactg atttetgtat aacteecaat 120 actaaaacga catgttttct catttacaca ccctgcaata aatgtccaat taaagt <210> 43 <211> 323 <212> DNA <213> Drosophila melanogaster

```
<220>
<221> misc_feature
<222> (1) . . . (323)
\langle 223 \rangle n = A,T,C or G
<400> 43
atttcgcgac aggcttcggc acgccagtat ataacccaaa acacacaaac gtcaggggct 60
ggaacgcgtc actgccgtgc tcctccagcc ggcacagtca ttccccgccc ccacaccaag 120
caaaaccggc cgcttgtgca gatgacatag gcgcgaccag ccaactgacc cggctgacca 180
gacttgcacc gtgcgccatc aactggaatc ttggccacaa gcacagcaat agtttggccc 240
qctatcccca cacaqaaacc cacantgggg gcctatggaa gaccacaagt ggttgcgtgg 300
aactgctaaa aatataaaac tgc
<210> 44
<211> 176
<212> DNA
<213> Drosophila melanogaster
<400> 44
caaqtqcqqc qgcgacaaga aatccgcctg cggctgctcc aagtgagett tcccccaaaa 60
aagatetgga gtagaggege tgeatettgt eteegaactg atttetgtat aacteecaat 120
actaaaacga catgttttct catttacaca ccctgcaata aatgtccaat taaagt
<210> 45
<211> 323
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(323)
\langle 223 \rangle n = A,T,C or G
<400> 45
atttcgcgac aggcttcggc acgccantat atancccaaa acacacaaac gtcaggggct 60
ggaacgcgtc actgccgtnc tectecance ggcacngten ttececgece ccacaccaag 120
canaaccggc cgttgtgcag atgacataag cgcgaccanc caactgaccc ggctgaccag 180
acttgcaccg tgcgccatca actggaatct tggccacaag cacagcanta gtttggcccg 240
ctatccccac acatanaacc cagattgggg gvvtatngaa naacacaagt ggttgcgtgg 300
aactqctaaa natatnaaac tgc
<210> 46
<211> 362
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (362)
<223> n = A, T, C \text{ or } G
<400> 46
```

<400> 46

```
gctgaactgg acctgaatat aaacntatac acatctattg caacaangat acacaccttg 60
ctqttaacca cctqcaacat ccaancttct tacatccctg gtgttagttc gacanactct 120
acatttcccc acctctgccg antgctgana gttaantcat gggaacagga natnccnctt 180
ccccaaaggg aatattttnt gttnaaataa atactgcctc ttgcngttca acgtananan 240
anaaataccn aatteegaaa ggggeenaan ttneegggen canannggee tgeetentag 300
qqaatcncca necettntt atanqeette tteegeetat aaacttgtge engaaneece 360
ng
<210> 47
<211> 416
<212> DNA
<213> Drosophila melanogaster
<400> 47
agtttacatg tactttattc gttttgtata tcccagacag atagagttat ttattgaaca 60
cttcaactqq ctaqqtcqta ttaqqgtctg cttgtaactt ttgtgtcagt aaccactcta 120
aaatagtata atgctagtaa ttctacccat caacccattg tatacatact tatattcaaa 180
accettteae caeattteta ageetagatt atggataatg cetetaatat gtaacgagtg 240
cttaggtcac cttagccagc cgctggtcga tgcatttctg gctgcgaagg tcgaaccaat 300
ttcccggact gcagtaatgc aaaaccgctt ttcccttcaa gcaaacataa tacttgttat 360
qctqcttqac qtctccaaat cgtgtatcct ctttcacttt ggtgcaatcg ggtacc
<210> 48
<211> 413
<212> DNA
<213> Drosophila melanogaster
<400> 48
caaatagttt acatgtactt tattcgtttt gtatatccca gacagataga gttatttatt 60
qaacacttca actggctagg tcgtattaga gtctgcttgt aacttttgtg tcagtaacca 120
ctctaaaata gtataatgct agtaattcta cccatcaacc cattgtatac atacttatat 180
tcaaaaccct ttcaccacat ttctaagcct agattatgga taatgcctct aatatgtaac 240
gagtgettag gtcacettag ceageegetg gtcaatgeat ttetggetge gaaggtegaa 300
ccaatttccc qqactqcaqt aatqcaaaac cgcttttccc ttcaagcaaa cataatactt 360
gttatgctgc ttgacgtctc caaatcgtgt atcctctttc actttggtgc aat
<210> 49
<211> 885
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (885)
<223> n = A, T, C \text{ or } G
<400> 49
rtnstartmn ctmrtnsttt ctamcmmntd skasamdsdy strmrdtaca stanyrmrma 60
chndsnnnng nagatacgcc aagctattta ggtgacacta tagaatactc aagctatgca 120
tcaagettqq taccqaqete ggatecacta gtaacggccg ccagtgtgct ggaattcgcc 180
cttcgtgaat tcggatctga ctgcaagtgc ggcggcgaca agaaatccgc ctgcggctgc 240
tocaagtgag ctttccccca aaaaagatct ggagtagagg cgctgcatct tgtctccgaa 300
```

ctgatttctg tataactccc aatactaaaa cgacatgttt tctcatttac acaccctgca 360

```
ttctgcagat atccatcaca ctgggggccg ctcgagcatg catctagaag gcccaattcg 480
ccctatagtg attcgtatta caattcactg gccgtcgttt tacaacgtcg tgactgggaa 540
aacctgggtt tacccaactt aatcgccttg cacacatccc ctttcgccag ctggcntnta 600
caaaaaggcc cncgattgcc ttcccacant gccacctgaa tgggaatgaa ccccccgtac 660
cggccttaac cgnggttggt ggttacccac ntacgcaacn tgcaccccta cccnncttcc 720
ttttcctctt cccnttccgg ttccctcacc tantggggcc taggtcaatt tcttnngcca 780
ccaaatntag tangtetttg cccccaaaag ttccctaatt gatettetaa atganntenn 840
gaaaccncac cgtntttant aaggatgcat cgcnngtaaa catcc
                                                                 885
<210> 50
<211> 496
<212> DNA
<213> Drosophila melanogaster
<400> 50
cttgatccag caatctattt ttcacaaacg ccaatgtcaa attttcttca gataatgtct 60
ctatcgctgt aataattcca tcgtaacacg aaggcaatgt gatcagtaga tgagaaattt 120
tatccatctc ttctattttt gcaccagctg ccaacaattc acttataagt tcgtcaaaaa 180
tatgaaaatg gcttaatagt gacatctcac tcgatagctt cagagaaagc aaacgttttc 240
gcagcgccag ttgcgacgcc aaactttttc gttcataaac ggcgtccaaa ttctcaagaa 300
tctqacqcqc cqtaatgtcg cttgttgcga aatttaaaaa cgagtcgctt aggtacgaat 360
tcacgaagcc gaattctgca gatatccatc acactggcgg ccgctcgagc atgcatctag 420
agggcccaat tcgccctata gtgagtcgta ttacaattca ctggccgtcg ttttacaacg 480
                                                                 496
tcgtgactgg gaaaac
<210> 51
<211> 936
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(936)
<223> n = A, T, C or G
<400> 51
acatcaatgc tagtgcttcc ttttaccgaa aacctattga atacgctaaa aaattggaat 60
agtcgcaagc ggaagtcggc caaaaaaatc cttaagaatt ttggaaccag ttcttctact 120
tgtcgtatcg aaccaggcgc gtgtcgtcgc cgacctcctc cagatccttt ggatcgcggc 180
ggaagcgata agtgcccaca tcctggttgg ccgattccgg caacgtcacc ttgatgccct 240
tgtactcggt tcgaccttcc ctgacctccg gcacccgcag ctccatctcg gccttgtact 300
cgtcatcgtt accaatgtcc acgtcctgga ccgttctttt gcacggtggg atcctcctcg 360
tectggttee agecateaaa tetegatggg gacaatgggg ttgeegtega egectaegae 420
ggnactangt gcgccantag ggcaggatct ccacgggtaa tctccagaaa atcggaattc 480
tctggctggg ttggcagact caaactgcan tcccgcantc cacnaatgtt tgggtcanct 540
ccntttgaaa tgggaggtat gggtccatca aggnagcgaa attcacnaaa nggggnaatt 600
ctgcannata tccatcacac tggngggccg ctccaagcaa tgcatctaaa agggccccaa 660
ttcctcccta atangngagt ccgtattaca aattcaacng ggccgtcgtt ttanaanngt 720
cqqqaatqqq qaaaaacccn gggngntaan caaacttaat ccnccttgga agcanaatcc 780
cccttttcgc aagangggng tatnannaaa nagggccgca acgantgncc cttcccaana 840
anttteenan eetgaatngn gaatggaene neeetgtnnn ggggeaatna acceggnggg 900
gttgntggta nccncaangt ntacggctaa anttgc
                                                                 936
```

```
<210> 52
<211> 629
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(629)
<223> n = A, T, C \text{ or } G
<400> 52
gtttgcaaac cttcctattt aagtaaagtg tttgactctg gctcccaaag cttnccttgg 60
gaaacgggaa aaatteteta cantgtatat gtgcgcatge aaacteattt ggtaaattac 120
acatnaataa atatgtataa caacaactan acatatgtnn atggaaaata aaaattttca 180
gtaacgactn aactcgantg tcggtagcat naaggganna agtcgtcnan tgttattatc 240
taatttqcaq cctgtattgt ccagatacaa tatgtnatng atgcantgta tatctnttgt 300
gtacatanat atatgtttaa ggcgactcct atttntctgc ntgtgcatat cgatcaaatg 360
cctactttcn tgattgtttn gtgtgtttcc nctaaggaaa anatacatgt gttatatcny 420
naaaagaatt gtatcgtatt aggtttgctt cctcaaacat ccaccaaaaa tcgntntcnt 480
ntananccna aaaatacgaa aatnnttgtg ccttaaaaan aaacaatcga ggnaatccca 540
antecnaatg eggngteact engntaceat atgetenaan etteeetggt teaaageeea 600
tncccacttn cccatganga ccttcgctg
<210> 53
<211> 977
<212> DNA
<213 > Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(977)
<223> n = A, T, C \text{ or } G
<400> 53
tacgctataa aactacgctc ccattgccgg attgttattg gagaattgcg cccgccaccc 120
aagcagccac ccacgtatca cccgctcaca agagcggaaa atggatacag tccgggttcc 180
tggcggtaga accgtaattt ctgtgatttg ctttttttgt gttaagtaag tatttaataa 240
gtagattact gangtttgct gctccgcggg cgattccctt aggcggccac ttcgctangc 300
ctcggnccca ttctgaacct catcctttgt gctgggcctc atcaagcanc gaattcacna 360
agggcgaatt ctgcagatat ccatcacact ggcggccgct cgagcatgca tccgagaggg 420
cccaattccg cccctaatag ntgantccct attacaattc actgggccgg tcgtttttaa 480
naaccggtcn ntgactgggg aaaaccctgg gcggttnccc aaacttaatt cnccttgcaa 540
gcacantene ceetttegee aagetgggng taattanega aaagnaggee egcaceegat 600
nggcccttcc caacnngttg cgcaggccng aaannggccg anatggancg cgccccggtn 660
agccggngca attaatccgc nggnggggtg ttggtgnggt taanccgcaa accgtgaccg 720
gentatacet tgccaaggge cectanetga cenggntent ttteggettt entteneett 780
ccttttnctn ggcnaaantt cgnncgggtt ttcnccggtc aaagctcnta aatnnggggg 840
gntccctttt agggnttccn natttnaggg gctttnacgg gnaanctcca anccccaaaa 900
aancttgctt nnnggtgaan gggtnnacgt tnntggggca ncncccctna taaagggntt 960
                                                                 977
tnccnctttg nagatgt
```

```
<210> 54
<211> 875
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) ... (875)
<223> n = A, T, C \text{ or } G
<400> 54
qcqatcttac aaaataaata acagcaaata gaaagataaa cttacatata agcgcaatat 60
tcaaatgttt agtggcgtct acgaaatgtt tttcaattac tgctggtgta agacacatag 120
ataataaatq tgatgtgttt tgtgtgtttt tttangtttg gcctaccaga agtgtgctct 180
aaatatatac caatgtgaat cgaaatcgta gctccttgcg ttctcctata tacatgtgca 240
ccgtgagatc catagtccca tcgttttcgg tttaagttac ccycgggcyy yggcagattc 300
gnaatcatat gcacgtataa agatagactg cgtgcacagc tccggccctc ctcctgggaa 360
aacgcatagc cataccgaat tatccgatcc caangcatac atgggtagaa ngatctcggg 420
teegtteate aactteggga natgtegenn egnteeggte teegttteeg egaacageet 480
tccggtcagt gtcctannnc acgggtatta aggtaccaag tttgcaagat cacatcgatc 540
agcagcgtgg gtaaatgngg gcaccagcag tcaaggcang cgaattccac cnaangggcg 600
aaattccggc aagaataatc catcacactg gggggccggc tcgaagcatg caatcctaga 660
aggggcccaa aattccgccc natattgagg tccatattan aaaagttcaa tgggccgtcc 720
gntttannaa acgttcntga ntgggaaaaa ncccnggcgt ttacccaact taaatcnccc 780
ttncaagnaa atnccccttt tcagcnaanc tgggcgtaat nnncnaaana ngncccgcac 840
                                                                    875
cggntgcccc tttcccaaca atttngccca agnct
<210> 55
<211> 465
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(465)
<223> n = A,T,C \text{ or } G
<400> 55
qqqqtcqtac tcqqtqaqqa aatccaagcg cttatcatgc ttcactttgc agacaatcag 60
tacatcgatt gatgaggaaa aagaagaccc cttgaatggg tcgataatca ttactgtcca 120
actogattag agotocotog ttgaggaagg tottgootto cagattgooa ttgaagcoot 180
ggaccatttc cttgaccgcc cgcgtggcat ggctattctc cagatcctcc gtcgccgtan 240
tgctctccgc ctccaaactc tctgccttca ggtgactgga agtcttgcca tccgtcatgg 300
tggccanaat attgcgctgc tcaatcagaa tgtgcgacag ttgatacatt tccgactcga 360
gatgtgatat ctccttggnc gtctgtataa actccatata gttctttttg catgtttgct 420
tgagcgttgc tgccgtcgtt tcgttgtagg cctcgatttc ctttt
                                                                    465
<210> 56
<211> 238
<212> DNA
<213> Drosophila melanogaster
```

<220>

```
<221> misc feature
<222> (1)...(238)
\langle 223 \rangle n = A,T,C or G
<400> 56
tgctgcctgc tccttttggg actcctgggc ttcctagctg ctcccggcgt cgcctcgcca 60
tctcgccaca ctggaccagg aaacggatcg ggatctggag ctgggtccgg aaatccgttc 120
aggtctccaa gctcacagca acgaccactg tactacgacg ctccgattgg gaaaccatcn 180
aagactatgt acgcctgacg tanagaatga aacaanaaag atttgaaacn cctanact
<210> 57
<211> 237
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(237)
<223> n = A,T,C or G
<400> 57
gctgcctgct ccttttggga ctcctgggct tcctanctgc tcccggcgtc gcctcgccat 60
ctcgccacac tggaccagga aacggatcgg gatctggagc tgggtccgga aatccgttca 120
ngtctccaag ctcacagcaa cnaccactgt actacgacgc tccgattggg aaaccatcga 180
agactatgta cgcctgacgt aaagaatgaa acaataaaga tttgaaacgc ctaaact
<210> 58
<211> 238
<212> DNA
<213> Drosophila melanogaster
<400> 58
tgctqcctqc tccttttqqq actcctgggc ttcctagctg ctcccggcgt cgcctcgcca 60
tctcgccaca ctggaccagg aaacggatcg ggatctggag ctgggtccgg aaatccgttc 120
aggicticaa geteacagea atgaceaetg tactaegaeg eteegatigg gaaaceateg 180
aagactatgt acgcctgacg taaagaatga aacaataaag atttgaaacg cctaaact
<210> 59
<211> 253
<212> DNA
<213> Drosophila melanogaster
<400> 59
attacqtccc tqccctttgt acacaccgcc cgtcgctact accgattgaa ttatttagtg 60
aggtctccgg acgtgatcac tgtgacgcct tgcgtgttac ggttgtttcg caaaagttga 120
ccgaacttga ttatttagag gaagtaaaag tcgtaacaag gtttccgtag gtgaacctgc 180
ggaaggatca ttattgtata atatccttac cgttaataaa catttgtaat tatacaaata 240
                                                                    253
aaaacaattt acc
<210> 60
<211> 236
<212> DNA
<213> Drosophila melanogaster
```

```
<220>
<221> misc feature
<222> (1)...(236)
\langle 223 \rangle n = A, T, C \text{ or } G
<400> 60
aacaggcaaa agcgatatca gtaataaact aaacgcacca attgtttaaa taaccaaagc 60
gttaagaaaa aaatcaaaga caaagccacg gcaaaaggcg cagacaacaa gttgtttgct 120
tttagttcgc gttctcctta ttttattttc cttccgttcg attttccacg cacgcgcgtc 180
gcagaaacgt caaattgaaa acatcancag ttgaaagcca actgttgcat tctacc
<210> 61
<211> 247
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(247)
<223> n = A, T, C or G
<400> 61
ttcaggcatc ttccttctaa ttctggctgt gggtttggca caaatgccgc tgcaggtggc 60
cgcccagggc caaaatggac attcgcaggg acagccgcca agaccgccaa atggcaatgg 120
aaacggcaac canncagagt ggacaaggac aaagcgggca gaacaactag aactgggata 180
tttctggagg gggacaacac acctcctcgc cactttccca gttacttaaa taaacacttt 240
                                                                    247
ccccaqc
<210> 62
<211> 767
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1) . . . (767)
<223> n = A, T, C \text{ or } G
<400> 62
ctaattgcgc tccatccatt tgttcctgtc cggtgattcc cacatcttta atggtggagt 60
tatagaaatt attttgaata atcaaatcat ctccaattat cttcactatt tcactcaaag 120
acatggtttt tagcgtgctg gtcgtgttgc ttccaattgc gctgacggct ttcgaccatg 180
atccgaattc acnaagggcg aattctgcag atatccatca cactggcggc cgctcganca 240
tgcatctaaa agggccccat tcgccctata ntgagtccta ttacaattca ctggccgtcg 300
ttttacaacg tccttgaact gggaaaaccc tggccgttac cccaacttna tcgcctttgc 360
agcacatece ecettteeg ecagetnggn gttaatacea anaaggeece etawtawtga 420
cactatagaa tactcaagct atgcatcaag ctwrratacc gagcawcgga tccamataag 480
ataancagag accagcacaa gtwgtagcat rggabayata tacagcccat atacggagam 540
ayatatcagg atatwtwtat atatatata ataaacagaa acatacatat wtatacagta 600
tatawgcama aaaaaataca ttatataaaa aaatatatac ragtatatam acacacacva 660
gtatatatat atacgtacga rcacgtacgc atwarcacac acacrvcacg gacacacaat 720
wtacrcgacg cacgcacatt tahacacaat tahtatacac mtaccaa
                                                                     767
```

```
<210> 63
<211> 353
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A, T, C \text{ or } G
<400> 63
tawtgacact atagaatact caagctatgc atcaagctwr rataccgagc awcggatcca 60
mataaqataa ncagagacca gcacaagtwg tagcatrgga bayatataca gcccatatac 120
ggagamayat atcaggatat wtwtatatat atatatata acagaaacat acatatwtat 180
acaqtatata wqcamaaaaa aatacattat ataaaaaaat atatacragt atatamacac 240
acacvagtat atatatac gtacgarcac gtacgcatwa rcacacacac rvcacggaca 300
cacaatwtac rcgacgcacg cacatttaha cacaattaht atacacmtac caa
<210> 64
<211> 609
<212> DNA
<213> Drosophila melanogaster
<400> 64
aatttttagc aatttcttat ttggtttttc ggtactttct ctagctgctt ttacttgatc 60
gcacatatat atatatat atattctata catatacata ttcatatgaa tatatctttt 120
atcatcttta agaggagatt ttcagtgtct gtgtgggtgt gtgtgtttgt gtatgcttgt 180
atgtgtccgg ttgtcctata gccatttgaa ccactaagaa tttgtagccg gggaagttgc 240
tatcaaatag agttgctcaa caacggctct ggctcgggtt gaaggaattt ttggaggtcg 300
aggggagcca acgacacaac gcaagctgcc ccaaaaaaac gggctaagaa atcaggttgg 360
gctaatgaaa tacaaagctt gcaagggcaa gaagaagaag aagactgagc actttctttt 420
cggctgcatc gcttacaacc agttcatagt gcgcctctct ccgcgcttct catcgatggt 480
aggtaagccc ttgtttcaaa tgatgtgaat gggtctaatt aggagtttgt ctgtctgtgt 540
ctgtattgtg tctgcacaag ccagagaaag agaggctggg gagaatggga gaaagtgggt 600
gatgggagg
<210> 65
<211> 554
<212> DNA
<213> Drosophila melanogaster
<400> 65
taaacaaaaq aaaaacaaaa ttccttttga aaatgcaaca ttaacaaata gaaagaaaca 60
aaacagaaca aacacgtaaa gaaagaggcc actacaaaac tgaaaagaaa atgtgaaaaa 120
tacaaaattt cgtttagcca ttaagattgt taagaatcag agtgttagat gtagatgagc 180
aagtgaattt tgtagggctt tgctaccagt tttacctgct taatgaataa gggtaaaaca 240
ttcatatgat tggattggaa gaatatatcg ggaatgctaa aaattattgg agtataagtt 300
aaatacaact gcgatttatc tgtttaagtt ttaaatgcta tattaacgat gtataacttt 360
ggttcaatgt tttagtcata ggtttttaca tttaactcaa tgtggggaga gagcttttaa 420
atagateata egaacetaca tattacattt ateggttatt ataattgttt tggeeetete 480
atccaatata tacatatttt atggtcctag gttgtctttt ttaagttttc cattttgtta 540
                                                                   554
aagaaagttc gatt
```

```
<210> 66
<211> 647
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc_feature
<222> (1)...(647)
<223> n = A, T, C \text{ or } G
<400> 66
tggactgata tgcaaaaaag catttcacca cggcacctgc gcatataatg gtggatagcc 60
tgtggaacgt ccttatctta tcgtgtaagg tggacacgac acgaacacta atcagagaat 120
agagcagttc taactcacaa tattgataaa caaagtaagg gccagccgag agatacacgc 180
gcatttattg gcagcaaaca gaagccaaaa ctacggacat gtccgaatcg ggaatcaaaa 240
agttgagcca ggagcggact cgcgaatggt tggctagtca ggaggacgag gaactggagt 300
ccattgcaga gtcctcggtt gtggacagct tggactacga ttataccgag gaagaggagg 360
atgccgacca aaataccagt gaagaaatca gcactatgac actaggcact caaatcgcta 420
ccaaaaagca ttcgatcatc agcgacacca taagggacct tatgaactcg atcaacagca 480
ttcagacttt gggcaacgtt aatataagca actccacgaa cgtccatatc ggcaatgtta 540
ccaatattaa tggaaatata caaatcatag ccgatggcct tactcaaaac cgaagagatc 600
ggcggcatgt ttcaccaccg agagataacg cttccaaaac tccgacn
                                                                   647
<210> 67
<211> 600
<212> DNA
<213> Drosophila melanogaster
<400> 67
gttttcaaac gctcagcgga gaaaatgtaa cggacgaacg cggctggcaa aactcacaga 60
cggtacaaga gaaccagaat aaaaaaggac tccacaagaa acggcaactc gacaaaatct 120
atacaaaagt gtctggctcg actgtgtgtg tgcttctgag tgaatgcttg tgtatgtgtg 180
tataaattag tttggttgtg tgagttgtta gagtcaaaga actaaaataa gactttcaga 240
tctagcaaat atgtcccata gttccccgag acgcgtatcc actgctgtag ccacttaaca 300
aacaatgccc aaagttaagg cgcacggaat ctctaataat cgaaaccaat aaaatgagcc 360
ccgttgcctg cagcaccaac actaacatcg gtcacatcga gcaggttgca ggcaatcaaa 420
ggacaaatat agctgggata agatcaatcc aaattggaac aaccacaatc acaacgatat 480
tqaaccaqcq atqaqatgga gcgtccgttg ggatgacgaa ctcagaaact cagtaaggga 540
gctgcaactg atactgaaac tgaaacagaa accacagcgg cactcggaat ttagaggcga 600
<210> 68
<211> 598
<212> DNA
<213> Drosophila melanogaster
<400> 68
ccgccgagcg cctgctgcag catccettcg tccagtgcga gatgtccttg cgggtggcca 60
aggagetget geagaagtae eagagteeea accegeagtt etaetaetat etegatggeg 120
atgaggagtc tgtggcagga gtgccacaac gcattgccag caaaatgacg tcacgcacca 180
atggcgtgcc agcgcaaaat cacactaa aaacaggcat gacgacgaac tccacgtgga 240
atgagcgatc ttctagtccc gaaacgttac ccagtgacat gagcctctta caatatattg 300
```

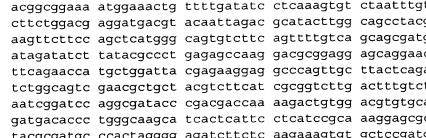
```
atgaggaget gaagetaaga gegaeettge caetgaacaa egacaccaaa gatecaeteg 360
gcgccgagtg cagctgctcc tcccacaatg gaggagccgc cggaggagga ggaggaggag 420
gagttggagt aggagcaggc ggagcagccg cgagcggcag cagcagcagc agcggaggcg 480
caacagtegg caccacteat catcageace aacageacea ceaggateae caccateega 540
atcatctgca tcagcatcag gcccatcaat tgccgcaaca gcagcagcag cagtcaca
<210> 69
<211> 420
<212> DNA
<213> Drosophila melanogaster
<400> 69
cagctggacg cgccgagcat catggacgcc ttcctggaca ccgagcgaca gagaatcgag 60
cgcgagcagc aattggcggc ggcggagcag gatgccgatc gccgggcgga gcagaaccgg 120
ctggaactgt accagatttt ggccgcctcc gagcctgatc cgcaacctta ccagaggaag 180
ccggcggcac agccgaatgc tatggaccaa ctggaggcca ttgtggagca gcagcagcag 240
cgcgagctga aggagcagca ggagcaggcc aaggcaccgg tctacgtgcc tcccgaggag 300
gtgaacgagt cgagcgagct gtacttcccg gacaactttg ctcctttcaa gagagcaagg 360
ggtcgctcca ggggaggatt ggccgaggag gtggaggact aacagccgaa gcgctccttc 420
<210> 70
<211> 547
<212> DNA
<213> Drosophila melanogaster
<400> 70
aagegtgeca gaaatggeaa egacagtteg ggtteggaet egaatteeag eagteegege 60
cagcaaggca gccctccagt gatctgtgag gatgcggctg cttgcgcagc tctctccggt 120
tacactgtgg atcagetete ggatetggee agteactgee cagtgetgag taacaacaat 180
gctgtgggac ctaccggagt tagtggtggt ggcgatgcgg ataccaacaa tgtgaacacc 240
acteccegte agtgecetet tegettggtg ggeggteagg aagtgatggg eeagtgeeca 300
gtgccgcaca atcaggcaat ggttcctgcc aaatgtccag tagcgcatgc agactctggg 360
gattccttca gcgccaagag tggaagtgga ggggaatcgg ccaccactgc tcactgtcca 420
ctacagatgc ccgtgggaca ggacttcatg ggcgaatgtc cgtacgttaa caacgatgtg 480
aaggtateet ttgeecaage tggaaagtgt eeagtgaetg geggtgtgge aggageatea 540
                                                                   547
gcttcta
<210> 71
<211> 605
<212> DNA
<213> Drosophila melanogaster
<400> 71
atgaatcctc tggacaaaat acacgctcta gatgagatcg aaaaggagat aatcctgtgc 60
atgcaaagtg caggacaagc cttgcaggag ttgggcaagg aaaagtcttc ccagaaaaat 120
gcggagaccc agtcgcagca gtttctcaag agtctgtcca gcgtggaatc gaagctgtcc 180
gagcagatca actacttgac ccaggtgtcc acgggtcagc cacacgaggg ttccggctat 240
gcatccgcca aagtgctcca aatggcttgg catcgcattc agcacgctag gtccagagtg 300
cgtgaacttg aggaaactaa ggccaaacac tcacatgcag ctcgtcagca gttgaagcgt 360
cacaggaaca tgccgccgcc cagcaacagc agcagcaaca acaacagcag cagcagcaac 420
```

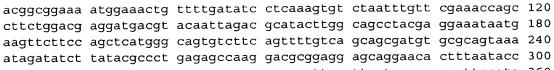
aacaacagat gcaacaggcg gcacaacagc agcaacaaca aaccggagga ggaaatgccg 480 gcagcggaga tcatccctgg gcggagactc ctcaatgtca accaactaat cttgcgctat 540

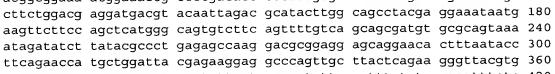
```
ctttaagggt aagggtttta aattttttag agtgcattcc gaaaaggcac attttgtcca 600
                                                                   605
ccaat
<210> 72
<211> 630
<212> DNA
<213> Drosophila melanogaster
<400> 72
tagatccgac agcacagtca tgaaatcaga ccgagaagcc ggtcgtgccg attcgcgatc 60
ctggcgggtc cattgctcgt cctcgtgcaa tcggacattg tattcctcct gattctcatt 120
tccatcgggt cgcgaccaga tgagcttcaa tccattgcca ataagcacaa tatcgtggcc 180
acgctcatag ttgccatatg actccactat tagactgtac gacaggcggc caccgtacga 240
gaatagctgg ttgcccagca cacttcccct aagactccag tacttgggca gataggaggt 300
gtgcgtgtag gtatacatat tcctagatat gtcgggaatt aagttctcgg tgtcctggac 360
agetecgett tegtetgtaa ttaatggtge gttaagaata aagteeaceg gtattagetg 420
gcggtacaga gctgccgaac gacactggct ggccaatcca gagcagtagc actctttgca 480
gccatcctga ttttgagcag acagtccata ggttccaggg cggcattggt cgcattgatc 540
accaatcacg tttctcttgc acaggcattc gttgccgcgg caatcataga tgccctctat 600
                                                                   630
ttggcaatag gccgtgcatt ccaaagtttg
<210> 73
<211> 638
<212> DNA
<213> Drosophila melanogaster
<400> 73
taaagacccg cattgctgaa gtgatgcgcg atgatattgg ttatggaaag aatcggactg 60
tcgaggtgcg aacagaggat gaagtaaccg ccgatatggt ggcacattcg catgccgccg 120
tccatgctgc acatgtggcg cacgcagccc atgtcgccca tgccgctgct atggagttgc 180
agcacagaag caaggaacca ccgccgccag agatcagtgt gtcacgtaag acgcccaacc 240
aatacgaggt ggtagacgcc agtggtcggc gctcagctgg cagtggttcc gtttcggttt 300
ccgtttcggg cgccaatagc caccattcgc cgtatcatcc accggcggcg gcctatgccc 360
ccagcaccta tgccttcccg tacagcgccc tgaatgtgcc cggtgccgcc ggtggattgc 420
caccgcacca gccgttgcag ctagcccacc aggcggtggc accacctggt gcctttgcca 480
aggccaaggc agcgcatgcc ctgagtgaac tgggtgcagt cggtggtggg gtgtcattgg 540
tggtgggcgg cggctctgga ggaattgcag gcggaccagg tggtgtctca gtcggtgtcg 600
                                                                   638
gtgtaccggg cggcggga ccaggaagcg gtggctgc
<210> 74
<211> 629
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(629)
<223> n = A, T, C \text{ or } G
<400> 74
atcaatgctc tatgctacta tatcttgcct tttactataa ctcgtcgcag ctccgacgaa 60
caggaatgtc aggcctgcca atcagtgtcc tcggtcatca tgatggtgct ccagtactcc 120
aacaatccag cgcatcattg ccagctcctg gagtgcctga tgactcttaa gcacaatgtc 180
```

```
gtcaaggaca teetetgegt tgtggeatae ggaacegetg ttteeegeae eteggetgee 240
aagctgctct tctactactg gccagccttt aacgccaatc tgttcgatcg caaagtccta 300
ctctccaaac taaccaatga cctagtgccc ttcacctgcc aacgggagca ctgtccgaac 360
tccgggaatg cggaggcagc aaaggtgtgc tacgaccaca gcattagcat cgcatacgcg 420
cccgattgtc caccgcccct ttacctgtgc atcgagtgcg ccaacgagat tcatcgggag 480
cacqqaaqcc tggagttcgg cgacattctg catcccatgc agcaggtatc gatggtgtgc 540
gaaaacaaga actgtcgctc caacgagaag tccgncttct tcatctgctt ttccacggag 600
tgtgccagct tcaatggcca ccatccgat
<210> 75
<211> 588
<212> DNA
<213> Drosophila melanogaster
<400> 75
agagagacaa cgacacgaca cgacataagt gggggtgggg gatagcgaac gagcccatcc 60
agcaacaaac ttcgcgaacg gcggcgacga cgcgcaaagc tcgactgaat tccaattcga 120
attegggeac geteagaagt accepttggag tgeagegaeg ceggegatgg gtaaacaaaa 180
ataggaatgg ctaaagacgt geggageeet tgegeteete cageeceegt tteegaeeet 240
cccccgctg ccgctcccgc tccaaagaca cactcctaca aagagctcaa ctgtttacac 300
acacacaca acacacaggc acggacacgg aagtgtgtat gggtgagacg taattaaagc 360
ttgaaaccga gtttacaaca acaacgagcc cgccagtcgc cacccaccac cccacgccgc 420
acacccctg cgaagagccg aagtcgaagc aacagctaga agaagaggct taagagagag 480
agagagagag agagagaga agagcgggaa agagggaaaa ttggatactt cgcgcagaga 540
                                                                  588
qaaaccccca acaacgagcg cagtttataa ataaaccttg ttctttc
<210> 76
<211> 579
<212> DNA
<213> Drosophila melanogaster
<400> 76
tttqqctaac catttcttt tatataaaag taagtaaact aagaactaat cctaggcctg 60
caggaagtet eegagattge cacatatttt gtegatttee geacateeeg attgeteeag 120
cgctgaaatg gcattggcga gggccacggt ttctttcagg gaatgggcct tcaaccatat 180
cctgccgttg actcccacag cgatctcgta gggcagttcc cgggtaagag cggcgagaac 240
agggcagttt tcccgcagca gcatccttcc cagattcagg ctgcacttga agaagaatcc 300
ategatagae atgeaateea eagetaegtg tggateeega ttaetetaae ettgtgegaa 360
ggtcaatttt ccccaaaaaa tataggaaac gtaccaggga aaacaacaaa aaagggaaag 420
cgcaccccca cactgaaaac cggcgagcac ctggaaacgc atacatataa aaggagagta 480
aatatacaaa ttggtagcac tttcgccgcc gtcttttaca cattcaagcc atgtcttgga 540
ccgcttcagt tttcttgagg acttacacca ctagcatga
                                                                  579
<210> 77
<211> 656
<212> DNA
<213> Drosophila melanogaster
<400> 77
attatgttca gaacetteeg eeeggagtea tegaagtggg tggteteeac ateaagaace 60
agaccagccc tttgcccacg tatatacaag aattcacgga gaagttcttc gacggcattg 120
tgtacatcaa tatgccctat attgagtata tgaatgacca gggattgaag gctatgtata 180
cgatgattca cggaaatccc aatgttgcct tcatttggaa tgtggagcaa ctagagcagt 240
```

```
tgccggccaa gaaaccaaat ctgttgacgc ttcatgtgaa tcaatcacta cagcaagaca 300
tettggetat geagtacgte aaggggttee tgaateatgg agatagttte agtetteagg 360
aggcaattca ctatggagtg cccgtcgtcg tgcttcccct taaactagag gaatttaata 420
atgcccaacg tgtaatggaa cgcaacttgg gtgtgatgct tcaggtcaag gaatttaacc 480
aaageteect gteggatgee ettaegegaa teetggatga ggagegttte ataagtgete 540
tccaccaggc ccagttgaag ttccggaccc gtccgcaatc cgccctggaa ttggctgtat 600
qqcatgcgga acaacttatc gccgaaccac gactatttaa acattttgca caaact
<210> 78
<211> 549
<212> DNA
<213> Drosophila melanogaster
<220>
<221> misc feature
<222> (1)...(549)
<223> n = A, T, C \text{ or } G
<400> 78
caacttcgat cggggcatat aaaaccagtg cttccaatcc gaaggcaaag cataaaagat 60
cagaacatca gtagccgaag attggctgag tagcacggac agcgggcaag tcctttgaaa 120
cgttggtagt ttgcaaccgg gtttgccaac ttcctttgga gttcagtggt gctcaactat 180
cgacacaact atcctcggct ttcgcaaaac tcagtaaacc gacacattga cattcgaaaa 240
ttgggattga aaactcaaga tgccgactac accacaggat cttgnccctt gcccactctc 300
ttgctcaaag acctccgacc gatagcagtg aggccaagga gcaggaggcc ggcgaatcgg 360
acaacctgcc caacctgtgc actttgtcgc tggacgaact gaaacagctg gacagggatc 420
ccgagttett cgaggaette ategaggaga tgteegtggt gcagtaeetg aacgaggage 480
tcqattcaat gatggaccag gtggagatta tatcaagaga gaacgagtgc aagggcattc 540
                                                                   549
atctggtag
<210> 79
<211> 486
<212> DNA
<213> Drosophila melanogaster
<400> 79
ccgtcggaca gctccgactc ggacatctca ctgggcaccc actcgccggt gccgagcagc 60
ctgcagctgc agcatagtcc gggcagcacc tccaacggcg ccaacgaccg cgaggagagc 120
ttgagcgtgg acgacgacaa gccgcgggat ctgagcggat cgctgccact gcccctctcg 180
etgeceetge egetggeete geceaeceae aegeegeece aactgeegee gggetaeggg 240
ggcggggcgg gcgcaggacc cggaggacct ctgaccggtc cgggctgtct gccacccttc 300
aagctggacg cggtcaccag tctgttcagc gccggctgtt acctgcagag cttcagcaac 360
ctgaaggaga tgtcgcagca gtttcccatc cagccgattg tcctgcgtcc gcatacgcag 420
ctgccgcagt cgctggcact gaacggcgca tccggcggac cgacactgca tcacccggcc 480
tacgcg
<210> 80
<211> 590
<212> DNA
<213> Drosophila melanogaster
<400> 80
aaaggggaaa ggcaggctta taagatgagt aaaacgagct tagcgacgca gaccaatggc 60
```

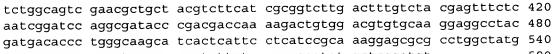








| 300 |
|-----|
| 360 |
| 420 |
| 480 |
| |



590

tacgcgatgc ccactagggg agatettete aagaaagtgt geteegatgt

Hall han the time con the hall the <u>=</u>? j 14

ij ij الله الله ال į.